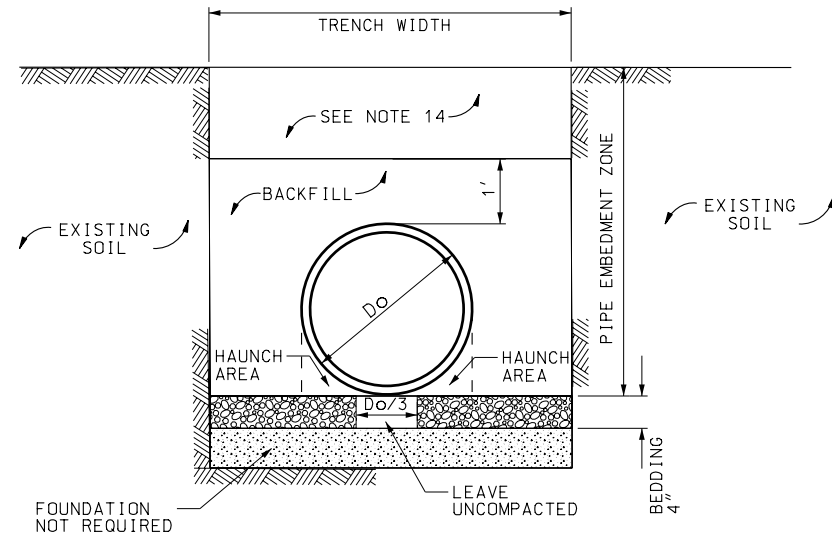
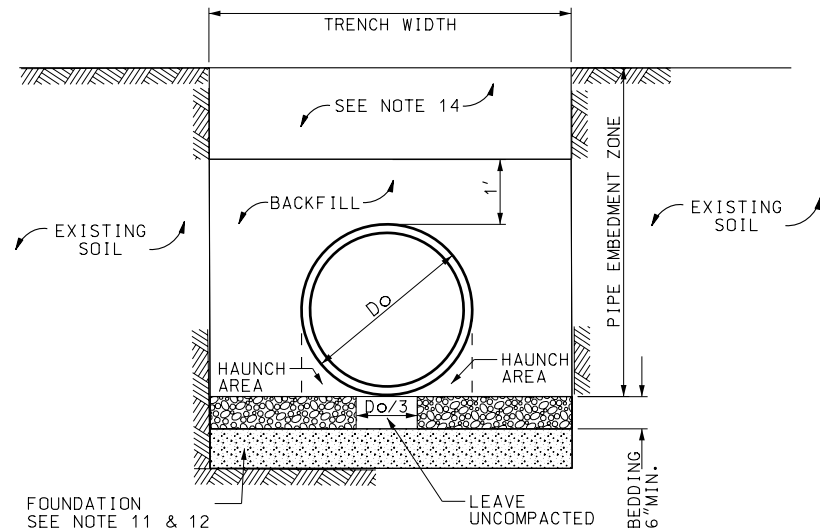


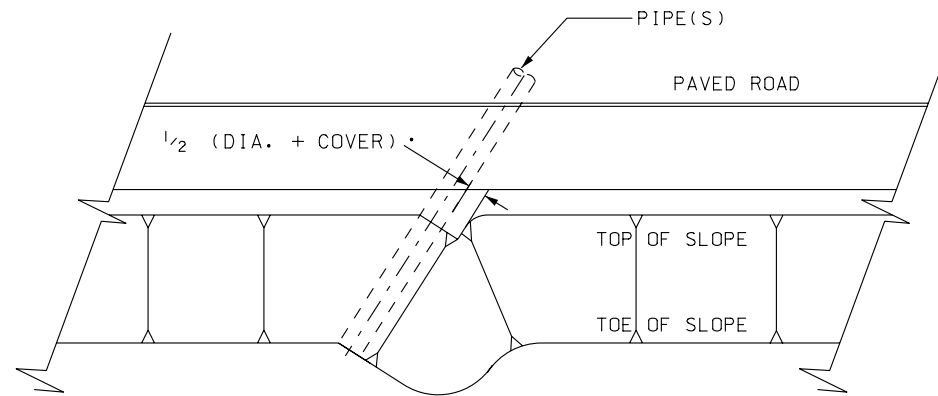
BACKFILL/BEDDING REQUIREMENTS FOR PLASTIC PIPE



DETAIL "A"
STABLE FOUNDATION SOILS



DETAIL "B"
UNSTABLE OR UNYIELDING FOUNDATION SOILS



END TREATMENT OF SKEW CULVERTS

NOTES:

1. PRECOMPACTION AND COMPACTION PER AASHTO T 99 WITH DENSITY NOT LESS THAN 90% OF LABORATORY DENSITY. PLACE UNIFORM LAYERS ON BOTH SIDES OF THE PIPE. FOLLOW STANDARD SPECIFICATION SECTION 02324.
2. USE ONLY TRENCH INSTALLATION FOR HDPE AND PVC PIPE.
3. USE STD DWG DG 3 IN CONJUNCTION WITH THIS DRAWING.
4. RECESS THE BEDDING TO RECEIVE CULVERT JOINTS WHERE APPLICABLE.
5. SEAL CONNECTIONS TO JUNCTIONS BOXES, MANHOLES, AND INLETS ACCORDING TO SPECIFICATIONS.
6. PROTECT PIPE INSTALLATION DURING CONSTRUCTION. DO NOT EXCEED DESIGN STRENGTH.
7. USE COMPACTION EQUIPMENT SMALLER THAN THE TRENCH WIDTH BETWEEN THE PIPE AND THE TRENCH WALL. FULLY COMPACT THE HAUNCH AREAS. HAND TAMP AREAS WHERE COMPACTION EQUIPMENT CAN NOT COMPACT.
8. EXCAVATE A TRENCH OF EQUAL OR GREATER WIDTH THAN SHOWN IN TABLE 1. INCREASE THE TRENCH WIDTH TO 2 FEET MINIMUM ON EACH SIDE OF THE PIPE WHEN EXISTING SOIL DOES NOT MEET THE REQUIREMENTS OF NOTE 9.
9. USE WELL GRADED BEDDING AND STRUCTURAL BACKFILL FREE OF ORGANIC MATERIAL AND FROZEN LUMPS, MEETING AASHTO M 145, A-1, A-2-4, A-2-5, OR A-3. EXCLUDE ANY PARTICLES 1.5 INCHES LONG OR 50% OF THE WIDTH OF THE EXTERNAL PIPE CORRUGATIONS IN THE GREATEST DIMENSION.
10. DO NOT DISTURB INSTALLED PIPE OR EMBEDMENT OR LEAVE VOIDS WHEN USING TRENCH BOXES AND SHIELDS.
11. REMOVE AS DIRECTED BY THE ENGINEER ALL FOUNDATIONS THAT HAVE UNSTABLE SOILS SUCH AS PEAT, BOG, SILTS, CLAYS, AND UNCEMENTED SANDS WHOSE WATER CONTENT EXCEED THEIR LIQUID LIMITS. REPLACE WITH SUITABLE BACKFILL MATERIAL.
12. EXCAVATE ROCK OR UNYIELDING MATERIAL FROM THE BOTTOM OF THE TRENCH AND PROVIDE 6 INCHES MINIMUM BEDDING OF BACKFILL MATERIAL.
13. FOLLOW STANDARD SPECIFICATION SECTION 00820 AND "THE UDOT CONSTRUCTION SAFETY AND HEALTH MANUAL" FOR MINIMUM TRENCH SAFETY REQUIREMENTS.
14. SELECT, PLACE, AND COMPACT BACKFILL MATERIAL IN THE ZONE EXTENDING MORE THAN 1 FOOT ABOVE THE PIPE FINAL GRADE, ACCORDING TO PLANS AND SPECIFICATIONS.

TABLE 1: MINIMUM TRENCH WIDTH

PIPE NOMINAL SIZE (INCHES)	MINIMUM WIDTH (FEET)
18	3.7
24	4.6
30	5.5
36	6.4
42	7.3
48	8.2
54	9.1
60	10.0

UTAH DEPARTMENT OF TRANSPORTATION

STANDARD DRAWINGS FOR ROAD AND BRIDGE CONSTRUCTION

PLASTIC PIPE
CULVERT
INSTALLATION

STD DWG
DG 5A

RECOMMENDED FOR APPROVAL

CHAIRMAN STANDARDS COMMITTEE

DEPUTY DIRECTOR

FEB.23.2006

DATE

FEB.23.2006

DATE

REVISIONS

1 10/2/23/06 M.F. NEW DRAWING, REPLACED DG 5.

NO. DATE APPR. REMARKS